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ABSTRACT

This report discusses the analysis by the State Department of Education of the statewide evaluation reports of all Elementary Secondary Education Act Title I programs in California for the 1973-74 school year. Students at all grade levels enrolled in ESEA Title I related programs gained more than one month's growth in reading skills for each month of instruction. Successful reading programs included the use of diagnostic/prescriptive materials, individualized instruction within the regular classroom, and assistance from instructional aides. Students in ESEA Title I related programs typically achieved gains equal to or greater than 1.1 months of growth in mathematics for each month of participation. Successful programs frequently reported the value of active participation by instructional aides and parent volunteers in both individualized and group instruction in the regular classroom. The health/auxiliary services component provided pupil personnel, library, and health services. The parent participation and community involvement component provided activities directed toward the improvement of communications between home and school. The intergroup relations component implemented activities designed to minimize isolation between different ethnic, cultural, racial, or social groups. A staff development component was active. (Author/JM)

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EVALUATION OF ESEA, TITLE I, PROJECTS IN CALIFORNIA SCHOOLS, 1973-74

ANNUAL REPORT

Prepared by the

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California State Department of Education
Wilson Riles, Superintendent of Public Instruction
Sacramento 1975

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SUMMARY

The statewide evaluation reports of all Elementary and Secondary Education Act (ESEA), Title I, programs in California for the 1973-74 school year were analyzed by the State Department of Education. A summary of each program component follows.

Language Development/Reading

Students at all grade levels enrolled in ESEA, Title I, related programs gained more than one month's growth in reading skills for each month of instruction. Almost 10 percent of the project participants moved out of the lowest quarter of the distribution of reading achievement test scores. Successful reading programs included the use of diagnostic/prescriptive materials, individualized instruction within the regular classroom, and assistance from instructional aides.

Mathematics

Students enrolled in ESEA, Title I, related programs typically achieved gains equal to or greater than 1.1 months of growth in mathematics for each month of participation. It was found that an average of almost 16 percent of the participating students moved out of the lowest quarter of the distribution in mathematics achievement test scores. Successful programs frequently reported the value of active participation by instructional aides and parent volunteers in both individualized and group instruction in the regular classroom.

Health/Auxiliary Services

The health/auxiliary services component provided pupil personnel, library and health services, and activities necessary to the success of project participants. Pupil personnel services included individual counseling, teacher consultation and pupil testing. Library services emphasized the use of a variety of materials and equipment. Health activities provided diagnostic, nutritional, and nursing services to students.

Parent Participation and Community Involvement

The parent participation and community involvement component provided activities directed toward the improvement of communications between home and school. Analysis showed that the most effective activities were those which included parent-teacher conferences, advisory committee meetings, and home-school community activities.

Intergroup Relations

The intergroup relations component implemented activities designed to minimize isolation between different ethnic, cultural, racial, or social groups. Analysis revealed that intergroup relations activities had resulted in increased parent participation, interaction between groups, and positive pupil attitudes.

Staff Development

The staff development component provided inservice training to school personnel working directly with the students. Major results included improved skill in individualizing instruction in reading and mathematics, and in planning and implementing instructional programs.

THE ESEA, TITLE I, PROGRAM IN CALIFORNIA, 1973-74

INTRODUCTION

Title I of the Elementary and Secondary Education Act of 1965 was designed to insure to every child an opportunity to succeed to the fullest extent of his potential regardless of that child's economic, social, or cultural background. As administered by the State of California, ESEA, Title I, was designed to provide services to educationally disadvantaged children in public and non-public schools under guidelines and regulations that require the inclusion of at least the following: an academic program consisting of language development and mathematics; auxiliary services which include health, pupil personnel services and library activities; parent participation and involvement through special parent programs and involvement on advisory committees; an intergroup relations component to alleviate the problems of social, linguistic, and geographic differences; and staff development activities for professionals and paraprofessionals.

Prior to 1973-74, Title I was the primary funding source for assisting educationally disadvantaged students. Legislation enacted by the state during 1972 took effect during the 1973-74 school year and provided an additional $82 million for educationally disadvantaged students. In addition, the Early Childhood Education program and the Bilingual Education program, both implemented during 1973-74, served educationally disadvantaged students as part of their populations. The concept of multifunded programs was to provide an additional $330 per participant, beyond basic aid monies, for each and every student. This was implemented by funding educational programs at the local level from several federal and state sources simultaneously.

ESEA, Title I, funded a variety of programs all directed toward the economically disadvantaged student. Fund distribution included: $125.0 million to local school districts; $9.8 million for children of migrant workers; $1.4 million for resident young people in California Youth Authority institutions; $2.0 million for handicapped children in special schools and state hospitals; $0.2 million for inmates in adult correctional institutions; and $1.3 million for neglected and delinquent youth in local institutions. The total of California's ESEA, Title I, program monies was approximately $141.1 million, including state administration of these programs.

The present evaluation report includes the results of programs for local school districts that were funded from ESEA, Title I, and other federal or state sources during the 1973-74 school year. Information relating to other programs funded by ESEA, Title I, will be found under appropriate titles in other reports.

Participants

During 1973-74, nearly 600,000 students in 1,615 schools or districts were assisted by ESEA, Title I, and a combination of other federal and state monies. Slightly more than 63,000 student participants were in programs funded only by ESEA, Title I. Table 1 shows the number of students enrolled by grade

level in special programs in public and non-public schools that were funded from ESEA, Title I, and other sources. The concentration of students served by the programs was in the primary grades where 56.5 percent of the participants were served; 30.3 percent of the participants served were in grades four through six. The breakdown in percent by grade levels and by years is shown in Table 2.

TABLE 1

Number of Students Enrolled in ESEA, Title I, Projects, and Consolidated Programs that Included Title I Projects, in Public and Non-public Schools in California, by Grade Level, 1973-74

Grade Level	Number of Students Enrolled		
	Public Schools	Non-public Schools	Total
Preschool	4,164	127	4,291
Kindergarten	33,810	292	84,102
One	91,193	1,508	92,701
Two	79,423	2,178	81,601
Three	76,471	2,243	78,714
Four	63,125	2,221	65,346
Five	58,090	1,813	59,903
Six	54,282	1,458	55,740
Seven	18,021	621	18,642
Eight	11,200	535	11,735
Nine	19,570	106	19,676
Ten	12,193	58	12,251
Eleven	6,343	14	6,357
Twelve	3,481	4	3,485
Ungraded	2,139	238	2,377
TOTALS	583,505	13,416	596,921

TABLE 2

Percent of Students Receiving ESEA, Title I, Services in California
by Grade Level Groups, 1967-68 Through 1973-74

Grade Level	Percent of Total Title I Enrollment						
	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74*
Kindergarten through Grade Three	40.4	41.8	50.4	52.1	51.9	54.0	56.5
Grades Four through Six	22.8	23.7	33.0	33.9	34.7	35.3	30.3
Grades Seven through Nine	19.9	20.7	8.9	9.1	8.2	6.6	8.4
Grades Ten through Twelve	12.4	10.9	4.0	3.6	3.3	2.7	3.7

NOTE: Figures for participants in preschool and ungraded programs are not included in this table; therefore, the values in the respective columns do not total 100 percent.

* These figures represent all participants in consolidated programs.

The count of particpants in Title I projects, and consolidated programs that included Title I, is made up of the pupils served, parents, school personnel, and others such as community resource persons and volunteers. In each program component there were different combinations of participants. Table 3 shows the number of participants who were involved in at least 75 percent of the activities in each component. Persons who were involved in more than one component were counted for each component in which they participated (duplicated count).

TABLE 3

Number of Participants in ESEA, Title I, Projects by Component, 1973-74 (Duplicated Count)

Program Component	Participants			
	Pupils	Parents	School Personnel	Other
Language Development	585,946	0	0	2,679
Mathematics	537,410	0	0	1,585
Auxiliary Services	499,912	0	0	2,931
Intergroup Relations	485,839	0	0	3,039
Parent Participation/ Community Involvement	0	273,882	0	2,159
Staff Development	0	0	50,544	987
Optional Component*	42,814	4,874	2,845	450

*Some local programs provided information in areas not specifically identified as components in the evaluation report form. Activities such as music, art, science, physical education, and social studies were included.

The number of persons (full-time equivalent) enployed in Title I programs, and consolidated programs that included Title I, is shown in Table 4. Instructional teacher aides and assistants constituted the largest category of persons hired.

TABLE 4

Full-Time Equivalent Personnel Employed
in ESEA, Title I, Projects, 1973-74

Position	Number of Persons (full-time equivalent)
Classroom teacher	2,177
Reading specialists	2,073
Mathematics specialists	884
English as a second language personnel	347
Bilingual specialists	202
Instructional teacher aides and assistants	14,722
Community aides	1,045
Directors, supervisors, coordinators and resource personnel	1,026
Counselors	328
Library media specialists	115
Library media aides	294
Teacher librarians	87
Psychologists and psychometrists	130
Social workers and attendance counselors	84
Nurses	230
Clerks and custodians	762
Evaluators	72
Other paid employees	704
Total paid personnel	25,282
Unpaid volunteers	22,406

LANGUAGE DEVELOPMENT COMPONENT

Language Development/Reading was one of the required instructional components in all ESEA, Title I, programs in 1973-74. The purpose of this component was to increase reading skills among identified program students through the use of professional and material resources, and to provide an English as a second language program for selected students.

Participants

A total of 555,774 students participated in reading instruction activities in schools with Title I programs. Most Title I participants were enrolled in schools which were also served by other federal and state funded programs. The number and percent of student participants in reading programs funded in whole or in part with Title I monies is presented in Table 5.

Objectives and Activities

Approximately 83 percent of the evaluation reports of Title I programs contained measurable objectives relating to development of student skills in reading. Objectives were most frequently stated in terms of the students' increased reading achievement--either in months of progress for each month of instruction, or in progress toward the national average--as determined by standardized achievement tests. Analyses were conducted regarding the relationship between the measurable quality of program objectives and the results obtained. Findings indicated that the more measurable the objective, the greater the incidence of program success. Projects with less measurable objectives reported fewer results that were directly related to program goals. (See Table 6.)

The types of reading instruction activities most frequently reported by the Title I schools which either exceeded or attained their stated objectives were analyzed. These reading instructional activities are presented in Table 7. The activities reported by schools for improving student performance in reading suggest great reliance upon diagnostic/prescriptive materials, individualized instruction within the regular classroom, and assistance from instructional aides.

Evaluation Methods

Successful Title I programs incorporated standardized testing in their evaluation design for determining the effectiveness of reading instruction. More than 25 percent of these programs reported use of standardized tests in combination with either locally or commercially developed criterion-referenced measures. The five evaluation activities most frequently reported by schools that were successful in attaining their reading objectives are reported in Table 8.

Standardized measures provided grade equivalent scores and percentile information on student achievement through pretest and post-test comparisons. As an average, schools reported seven months of elapsed time between pretesting and post-testing. Pretesting was most frequently conducted in October, 1973, with post-testing completed in May, 1974.

Student achievement was analyzed in terms of months of gain in reading per month of instruction in grades one through twelve, and by the amount of shift out of the lower quarters into the higher quarters in reading achievement for students in kindergarten and grades one through twelve. In determining gain scores, only data for those students were included for whom both pretest and post-test scores were available. When computing percentage gains, test data for all participating students at the time of pretesting and all participating students at the time of post-testing were used under the assumption that--although student populations might vary between pretesting and post-testing because of mobility factors, and so forth--student characteristics would remain similar.

Where the number of students reported by any Title I related funding source represented less than one percent of the participants, student data for those funding sources were deleted from the analyses.

Test information reported by districts, which was either incomplete or contained procedural irregularities, was not aggregated with statewide results. Incomplete data or irregular procedures included instances in which: (1) either pretest or post-test information was omitted, (2) test results were not given in grade equivalents, (3) test results were combined for several grade levels, (4) the standardized measure used in the pretest differed from the one used in the post-test, (5) non-standardized tests were used, and (6) no test results were reported.

Results

Results indicated that, with an average of seven months elapsed time between pretesting and post-testing, students in grades one through twelve gained 1.0 months or more in reading skills for each month of instruction. (See Table 9.) Analysis by funding sources and grade level indicated that achievement scores for students in Title I and Title I/ECE programs typically gained 1.1 months per month of instruction whereas scores for Title I/EDY combination programs averaged 1.0 months of gain per month of participation. In grades seven through twelve, scores for programs funded by Title I or Title I/Other averaged 1.3 months of gain and scores for students in Title I programs funded in combination with EDY or EDY/Other averaged 1.0 months of gain per month of instruction. (See Tables 10 through 15.) Table 16 shows the summary of gain scores by funding source and grade level.

An analysis of progress of students in kindergarten, and grades one through twelve, indicated an average reduction from 53.2 percent to 42.6 percent of the students scoring in the lowest quarter of the distribution and an average increase from 6.9 percent to 12.1 percent of the students scoring in the highest quarter of the distribution in reading achievement. (See Table 17.) Comparison of student achievement by grade level indicated that proportionately greater shifts between quarters of the distribution were demonstrated by students in kindergarten and grades one through six with lesser gains being made by students in grades seven through twelve.

TABLE 5

Number and Percent of Students Participating in ESEA, Title I, Reading Instruction Activities, by Funding Source, 1973-74

Funding Source	Number of Participants	Percent of Participants
Title I	53,053	9.6
Title I/ECE*	38,723	7.0
Title I/EDY**	99,097	17.8
Title I/ECE/EDY	54,965	9.9
Title I/Other	41,043	7.4
Title I/ECE/Other	30,756	5.5
Title I/EDY/Other	146,367	26.3
Title I/ECE/EDY/Other	91,770	16.5
Total	555,774	100.0

* Early Childhood Education
** Educationally Disadvantaged Youth

TABLE 6

Percent of Measurable, Vague but Measurable, and Non-Measurable Objectives in Reading for Each of Six Types of Results Reported by ESEA, Title I, Programs, 1973-74

Type of Result	Number of Projects	Percent of Objectives			Total Percent
		Measurable	Vague but Measurable	Non-Measurable	
Exceeded Objective	357	92.4	7.6	0.0	100.0
Attained Objective	317	65.3	31.9	2.8	100.0
Partially Attained Objective	260	79.2	17.3	3.5	100.0
Did not Attain Objective	54	83.3	3.7	13.0	100.0
Results Not Stated	290	37.6	32.4	30.0	100.0
Results Not Related to Objectives	263	24.7	17.1	58.2	100.0
Total or Average	1541	62.4	20.4		
		82.8		17.2	100.0

TABLE 7

Rank Order of Instructional Activities Most Frequently Reported by Successful Language Development Programs in ESEA, Title I, Schools, 1973-74

Rank	Activities	Percent of Reporting Schools
1	Diagnostic/Prescriptive materials	66.2
2	Individualized instruction within regular classroom	41.5
3	Use of instructional aides	31.6
4	Commercially developed instructional materials	16.0
5	Reading lab centers	13.9
6	Use of specialist teachers as resource personnel	9.3
7	Related staff inservice	8.9
8	Teaching toward objectives	8.3
9	Use of supplemental texts and materials	8.2
10.5	Whole class instruction	8.0
10.5	Small group instruction within the regular classroom	8.0

TABLE 8

Rank Order of Evaluation Activities Most Frequently Reported by Successful Reading Programs in ESEA, Title I, Projects, 1973-74

Rank	Activities	Percent of Reporting Schools
1	Use of two or more standardized tests	45.6
2	Use of one standardized test	13.2
3	Use of two or more standardized tests in combination with locally developed criterion-referenced measures	11.9
4	Use of two or more standardized tests in combination with commercially developed criterion-referenced measures	9.4
5	Use of one standardized test in combination with locally developed criterion-referenced measures	3.7

TABLE 9

Average Reading Achievement of Students in ESEA, Title I, Programs by Grade Level, 1973-74

Grade Level	Number of Students Tested	Average grade Equivalent Score		Average Months of Gain per Month of Instruction*
		Pretest	Post-test	
One	19,668	1.0	1.8	1.1
Two	58,539	1.7	2.4	1.0
Three	57,383	2.3	3.0	1.0
Four	45,203	2.8	3.7	1.3
Five	42,371	3.6	4.3	1.0
Six	41,489	4.2	5.0	1.1
Seven	13,881	4.6	5.3	1.0
Eight	7,156	5.1	6.0	1.3
Nine	12,135	5.9	6.9	1.4
Ten	4,293	6.4	7.2	1.1
Eleven	1,462	6.3	7.2	1.3
Twelve	605	6.5	7.4	1.3

*Average seven months between pretest and post-test

TABLE 10

Average Reading Achievement by Students in ESEA, Title I, Programs by Funding Source, 1973-74: Grade One

Funding Source	Number of Students Tested	Average Grade Equivalent Score		Average Months of Gain per Month of Instruction*
		Pretest	Post-test	
Title I	1,677	1.0	1.7	1.0
Title I/ECE	3,251	1.1	1.9	1.1
Title I/EDY	2,383	1.0	1.7	1.0
Title I/ECE/ EDY	3,716	1.0	1.7	1.0
Title I/Other	1,138	.8	1.7	1.3
Title I/ECE/ Other	1,818	1.1	2.0	1.3
Title I/EDY/ Other	2,755	1.0	1.7	1.0
Title I/ECE/ EDY/Other	2,930	.9	1.8	1.3
Total or Weighted Average	19,668	1.0	1.8	1.1

*Average seven months between pretest and post-test

TABLE 11

Average Reading Achievement by Students in ESEA, Title I Programs by Funding Source, 1973-74: Grade Two

Funding Source	Number of Students Tested	Average Grade Equivalent Score		Average Months of Gain Per Month of Instruction*
		Pretest	Post-test	
Title I	4,807	1.6	2.4	1.1
Title I/ECE	4,367	1.8	2.7	1.3
Title I/EDY	8,023	1.6	2.3	1.0
Title I/ECE/EDY	7,248	1.6	2.4	1.1
Title I/Other	4,141	1.7	2.4	1.0
Title I/ECE/ Other	3,334	1.7	2.5	1.1
Title I/EDY/ Other	17,037	1.7	2.3	.9
Title I/ECE/ EDY/Other	9,582	1.6	2.3	1.0
Total or Weighted Average	58,539	1.7	2.4	1.0

*Average seven months between pretest and post-test

TABLE 12

Average Reading Achievement by Students in ESEA, Title I Programs by Funding Source, 1973-74: Grade Three

Funding Source	Number of Students Tested	Average Grade Equivalent Score		Average Months of Gain Per Month of Instruction*
		Pretest	Post-test	
Title I	4,627	2.3	3.1	1.1
Title I/ECE	3,559	2.5	3.3	1.1
Title I/EDY	8,236	2.2	3.0	1.1
Title I/ECE/EDY	6,711	2.3	3.1	1.1
Title I/Other	4,225	2.3	3.1	1.1
Title I/ECE/ Other	3,282	2.3	3.2	1.3
Title I/EDY/ Other	17,435	2.3	2.9	0.9
Title I/ECE/ EDY/Other	9,308	2.2	3.0	1.1
Total or Weighted Average	57,383	2.3	3.0	1.0

*Average seven months between pretest and post-test

TABLE 13

Average Reading Achievement by Students in ESEA, Title I, Programs by Funding Source, 1973-74, Grades Four, Five and Six

Grade Level	Funding Source	Number of Students Tested	Average Grade Equivalent Score		Average Months of Gain per Month of Instruction*
			Pretest	Post-test	
Four	Title I	5,775	2.9	3.8	1.3
	Title I/EDY	12,516	2.8	3.6	1.1
	Title I/Other	5,672	2.8	3.8	1.4
	Title I/EDY/ Other	21,240	2.8	3.6	1.1
	Total or Weighted Average	45,203	2.8	3.7	1.3
Five	Title I	4,973	3.7	4.6	1.3
	Title I/EDY	11,187	3.6	4.3	1.0
	Title I/Other	5,263	3.6	4.5	1.3
	Title I/EDY/ Other	20,948	3.6	4.2	0.9
	Total or Weighted Average	42,371	3.6	4.3	1.0
Six	Title I	4,301	4.3	5.2	1.3
	Title I/EDY	11,097	4.2	5.0	1.1
	Title I/Other	4,902	4.3	5.1	1.1
	Title I/EDY/ Other	21,189	4.2	4.9	1.0
	Total or Weighted Average	41,489	4.2	5.0	1.1

*Average seven months between pretest and post-test.

TABLE 14

Average Reading Achievement by Students in ESEA, Title 1, Programs by Funding Source, 1973-74, Grades Seven, Eight, and Nine

Grade Level	Funding Source	Number of Students Tested	Average Grade Equivalent Score		Average Months of Gain per Month of Instruction*
			Pretest	Post-test	
Seven	Title I	3,785	4.7	5.5	1.1
	Title I/EDY	8,379	4.6	5.2	0.9
	Title I/Other	502	4.1	5.1	1.4
	Title I/EDY/ Other	1,215	4.4	4.9	0.7
	Total or Weighted Average	13,881	4.6	5.3	1.0
Eight	Title I	2,852	5.0	6.0	1.4
	Title I/EDY	2,681	5.1	5.9	1.1
	Title I/Other	452	5.1	6.2	1.6
	Title I/EDY/ Other	1,171	5.3	6.0	1.0
	Total or Weighted Average	7,156	5.1	6.0	1.3
Nine	Title I	3,863	6.0	6.9	1.3
	Title I/EDY	6,496	6.1	7.1	1.4
	Title I/Other	852	5.1	6.2	1.6
	Title I/EDY/ Other	924	5.1	5.9	1.1
	Total or Weighted Average	12,135	5.9	6.9	1.4

*Average seven months between pretest and post-test.

TABLE 15

Average Reading Achievement by Students in ESEA, Title I, Programs by Funding Source, 1973-74, Grades Ten, Eleven, and Twelve

Grade Level	Funding Source	Number of Students Tested	Average Grade Equivalent Score		Average Months of Gain per Month of Instruction*
			Pretest	Post-test	
Ten	Title I	758	7.4	8.6	1.7
	Title I/EDY	3,123	6.4	7.0	0.9
	Title I/EDY/ Other	412	5.0	6.0	1.4
	Total or Weighted Average	4,293	6.4	7.2	1.1
Eleven	Title I	318	6.8	7.6	1.1
	Title I/EDY	1,058	6.1	7.1	1.4
	Title I/Other	30	5.7	9.2	5.0
	Title I/EDY/ Other	56	6.3	7.0	1.0
	Total or Weighted Average	1,462	6.3	7.2	1.3
Twelve	Title I	141	7.4	8.3	0.9
	Title I/EDY	416	6.2	7.2	1.4
	Title I/EDY/ Other	48	6.3	7.0	1.0
	Total or Weighted Average	605	6.5	7.4	1.3

*Average seven months between pretest and post-test.

TABLE 16

Average Months of Gain in Reading Achievement Per Month of Instruction by Funding Source and Grade Level for Students in ESEA, Title I, Programs 1973-74

Funding Source	Grade Level											
	One	Two	Three	Four	Five	Six	Seven	Eight	Nine	Ten	Eleven	Twelve
Title I	1.0	1.1	1.1	1.3	1.3	1.3	1.1	1.4	1.3	1.7	1.1	0.9
Title I/ECE	1.1	1.3	1.1									
Title I/EDY	1.0	1.0	1.1	1.1	1.0	1.1	0.9	1.1	1.4	0.9	1.4	1.4
Title I/ECE/ EDY	1.0	1.1	1.1									
Title I/ Other	1.3	1.0	1.1	1.4	1.3	1.1	1.4	1.6	1.6		5.0	
Title I/ECE/ Other	1.3	1.1	1.3									
Title I/EDY/ Other	1.0	0.9	0.9	1.1	0.9	1.0	0.7	1.0	1.1	1.4	1.0	1.0
Title I/ECE/ EDY/Other	1.3	1.0	1.1									
WEIGHTED AVERAGE	1.1	1.0	1.0	1.3	1.0	1.1	1.0	1.3	1.4	1.1	1.3	1.3

TABLE 17

Percent of ESEA, Title I, Students Scoring in Each Quarter of the Distribution of Reading Achievemtn Scores by Grade Level at Pretesting and Post-testing: 1973-74

Grade Level	Number of Students Tested	Test	Percent of Students by Quarter			
			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Kindergarten, One, Two, and Three	155,065	Pre	45.0	28.7	16.1	10.0
	234,152	Post	34.2	28.5	20.3	17.0
Four, Five, and Six	124,371	Pre	59.6	26.6	10.0	3.8
	151,583	Post	50.1	29.5	13.9	6.5
Seven, Eight and Nine	21,378	Pre	71.4	18.8	6.7	3.1
	32,622	Post	64.6	22.9	8.8	3.7
Ten, Eleven, and Twelve	3,433	Pre	75.4	18.0	4.6	3.5
	5,183	Post	68.4	20.7	7.4	3.5
Total or Weighted Average	304,247	Pre	53.2	27.1	12.8	6.9
	423,540	Post	42.6	28.3	17.0	12.1

MATHEMATICS COMPONENT

Mathematics was a required instructional component for all ESEA, Title I, programs. Activities were directed toward increased mathematics skills for academically low-achieving students.

Participants

A total of 537,410 students participated in mathematics instruction activities in schools receiving Title I funds. The majority of these students also received materials and services provided by other federal or state funded programs. The number and percent of student participants in programs funded with Title I and other state/federal monies is presented in Table 18.

Objectives and Activities

More than 79 percent of all Title I related project evaluations contained statements of measurable objectives. Objectives were typically stated in terms of students' increased mathematics achievement--either in progress toward the national norm, or in months of academic growth per month of instruction--as determined by standardized achievement tests. Comparisons were made between the measurable quality of the objectives and the results attained. Typically, the more measurable the objectives, the greater the incindence of attainment. Programs with less measurable objectives more frequently yielded findings that were directly related to their stated goal. (See Table 19.)

Analyses were made of the types of instructional activities most frequently reported by the Title I programs that either attained or exceeded their stated mathematics objectives. The mathematics instruction activities most frequently reported by these successful programs are presented in Table 20. Successful programs typically reported the value of active participation by instructional aides and parent volunteers in both individualized and group instruction in the regular classroom.

Evaluation Methods

Schools that received funding under Title I were required to administer standardized mathematics achievement tests on a preinstruction and post-instruction schedule. Schools reported a variety of additional methods for evaluating the impact of their mathematics programs. It was found that 65 percent of the schools which either attained or exceeded their objectives employed two or more kinds of standardized tests to assess student achievement. These instruments were often used in combination with commercially and/or locally developed criterion-referenced measures. The five evaluation activities most frequently reported by the successful schools are presented in Table 21. These standardized measures provided student grade equivalent scores and percentile information which was used for determining program effectiveness.

The primary method for determining student growth in mathematics was to compute months of gain in mathematics skill per month of instruction for students in grades one through twelve during the elapsed time between pretesting and post-testing. Typically, pretesting was completed in October, 1973, and post-testing was conducted in May, 1974. In computing gain scores, only those students were included for whom both pretest and post-test data were available.

TABLE 18

Number and Percent of Students Participating in
ESEA, Title I, Mathematics Activities
by Funding Source, 1973-74

Funding Source	Number of Participants	Percent of Participants
Title I	51,228	9.5
Title I/ECE	38,431	7.2
Title I/EDY	94,199	17.5
Title I/ECE/EDY	53,650	10.0
Title I/Other	38,314	7.1
Title I/ECE/Other	29,514	5.5
Title I/EDY/Other	144,819	27.0
Title I/ECE/EDY/Other	87,255	16.2
Total	537,410	100.0

TABLE 19

Percent of Measurable, Vague but Measurable, and Non-Measurable Objectives in Mathematics for Each of Six Types of Results Reported by ESEA, Title I, Programs, 1973-74

Type of Result	Number of Projects	Percent of Objectives			Total Percent
		Measurable	Vague but Measurable	Non-Measurable	
Exceeded Objective	150	31.3	68.7	0.0	100.0
Attained objective	321	48.6	51.1	0.3	100.0
Partially Attained Objective	245	48.2	51.4	0.4	100.0
Did not Attain Objective	63	46.0	50.8	3.2	100.0
Results Not Stated	147	47.6	45.6	6.8	100.0
Results Not Related to Objectives	512	13.3	31.4	55.3	100.0
Total or Average	1438	33.9	45.4		
		79.3		20.7	100.0

TABLE 20

Rank Order of Instructional Activities Most Frequently Reported by Successful Mathematics Programs in ESEA, Title I, schools, 1973-74

Rank	Activities	Percent of Reporting Schools
1	Use of instructional aides	54.1
2	Whole class instruction	30.4
3	Individualized instruction within the regular classroom	28.7
4	Use of Parent volunteers	25.1
5	Related staff inservice	18.1
6	Use of basal text books	17.6
7	Use of mathematics specialist teachers in the regular classroom	12.5
8	Use of regular classroom teachers	10.8
9	Use of supplemental texts and materials	9.8
10	Use of Audio-visual mathematics materials	9.3
11	Use of manipulative mathematics materials	9.2

TABLE 21

Rank Order of Evaluation Activities Most Frequently Reported by Successful Mathematics Programs in ESEA, Title I, Schools, 1973-74

Rank	Activities	Percent of Reporting Schools
1	Use of two or more standardized tests	52.4
2	Use of one standardized test	16.1
3	Use of two or more tandardized tests in combination with locally developed criterion-referenced measures	8.7
4	Use of one standardized test in combination with locally developed criterion-referenced measures	5.3
5	Use of two or more standardized tests in combination with commercially developed criterion-referenced measures	4.9

Analyses were also made for students in kindergarten, and grades one through twelve, to determine the shift in the percent of students in each quarter of the distribution of mathematics scores between pretesting and post-testing. In computing the percent of student gains among different quartiles, test data for all students were used with the assumption that--although student population would shift between pretesting and post-testing--student characteristics would remain similar.

Where the number of students reported by Title I programs in combination with other funding sources represented less than one percent of all program participants, student data for those funding sources were deleted from the analyses.

Test information reported by districts which was either incomplete or contained procedural irregularities (see page 7) was not aggregated with statewide results.

Results

Findings indicated that students in Title I related programs typically attained 1.1 months of growth or more in mathematics achievement for each month of instruction. (See Table 22.) Achievement gains for students in grades one through six were comparable among the several funding sources, with students in grades one, two, and three averaging 1.3 months gain and students in grades four, five, and six achieving 1.1 months of gain or more for each month of participation in the program. In grades seven through twelve students in programs funded by Title I or Title I/Other, as an average, gained more than 1.2 months in mathematics per month of instruction whereas students in programs funded by Title I in combination with EDY and EDY/Other registered month for month gains. (See Tables 23 through 30.)

An anlysis of the progress of students in kindergarten, and grades one through twelve, indicated that, when comparing post-test to pretest results, there was a decrease from 57.7 percent to 41.9 percent of the students scoring in the lower quarter and an increase from 6.1 percent to 13.2 percent of the students scoring in the upper quarter of the distribution across all grade levels. Proportionately greater shifts in the percent values occurred in the lower primary and upper elementary grades than at the junior and senior high levels.

TABLE 22

Average Mathematics Achievement of Students
in ESEA, Title I, Programs
by Grade Level, 1973-74

Grade Level	Number of Students Tested	Average Grade Equivalent Score		Average Months of Gain per Month of Pretest and Post-test*
		Pretest	Post-test	
One	19,899	1.0	1.8	1.1
Two	40,377	1.6	2.5	1.3
Three	39,249	2.3	3.3	1.4
Four	43,414	3.1	4.0	1.3
Five	40,712	3.8	4.6	1.1
Six	40,357	4.6	5.4	1.1
Seven	13,881	4.6	5.3	1.0
Eight	7,156	5.1	6.0	1.3
Nine	12,135	5.9	6.9	1.4
Ten	2,398	7.0	7.6	0.9
Eleven	921	6.8	7.7	1.3
Twelve	436	7.0	7.8	1.1

* Average 7 months between pretest and post-test

TABLE 23

Average Mathematics Achievement by Students in ESEA, Title I, Programs by Funding Source, 1973-74 Grade One

Funding Source	Number of Students Tested	Average Grade Equivalent Score		Average Months of Gain Per Month of Instruction*
		Pretest	Post-test	
Title I	1,713	1.0	1.8	1.1
Title I/ECE	3,186	1.1	2.0	1.3
Title I/EDY	2,692	.9	1.7	1.1
Title I/ECE/EDY	3,716	1.0	1.7	1.0
Title I/Other	1,091	0.9	1.8	1.3
Title I/ECE/ Other	1,673	1.1	1.9	1.1
Title I/EDY/ Other	2,845	1.0	1.7	1.0
Title I/ECE/ EDY/Other	2,983	1.0	1.7	1.0
Total or Weighted Average	19,899	1.0	1.8	1.1

*Average seven months between pretest and post-test

TABLE 24

Average Mathematics Achievement by Students
in ESEA, Title I, Programs by
Funding Source, 1973-74
Grade Two

Funding Source	Number of Students Tested	Average Grade Equivalent Score		Average Months of Gain Per Month of Instruction*
		Pretest	Post-test	
Title I	4,180	1.6	2.5	1.3
Title I/ECE	4,301	1.8	2.8	1.4
Title I/EDY	5,523	1.5	2.4	1.3
Title I/ECE/EDY	6,183	1.6	2.5	1.3
Title I/Other	2,662	1.7	2.6	1.3
Title I/ECE/ Other	2,976	1.7	2.7	1.4
Title I/EDY/ Other	6,874	1.6	2.5	1.3
Title I/ECE/ EDY/Other	7,678	1.6	2.5	1.3
Total or Weighted Average	40,377	1.6	2.5	1.3

*Average seven months between pretest and post-test

TABLE 25

Average Mathematics Achievement by Students
in ESEA, Title I, Programs by
Funding Source, 1973-74
Grade Three

Funding Source	Number of Students Tested	Average Grade Equivalent Score		Average Months of Gain Per Month of Instruction*
		Pretest	Post-test	
Title I	4,276	2.4	3.3	1.3
Title I/ECE	3,251	2.5	3.5	1.4
Title I/EDY	5,971	2.3	3.2	1.3
Title I/ECE/EDY	5,601	2.3	3.3	1.4
Title I/Other	2,728	2.3	3.3	1.4
Title I/ECE/ Other	2,857	2.4	3.4	1.4
Title I/EDY/ Other	7,080	2.3	3.3	1.4
Title I/ECE/ EDY/Other	7,485	2.4	3.3	1.3
Total or Weighted Average	39,249	2.3	3.3	1.4

*Average seven months between pretest and post-test

TABLE 26

Average Mathematics Achievement by Students in ESEA, Title I, Programs by Funding Source, 1973-74, Grades Four, Five and Six

Grade Level	Funding Source	Number of Students Tested	Average Grade Equivalent Score		Average Months of Gain per Month of Instruction*
			Pretest	Post-test	
Four	Title I	5,567	3.1	4.1	1.4
	Title I/EDY	12,344	3.1	4.0	1.3
	Title I/Other	5,423	3.1	4.1	1.4
	Title I/EDY/ Other	20,080	3.1	4.0	1.3
	Total or Weighted Average	43,414	3.1	4.0	1.3
Five	Title I	4,900	3.9	4.8	1.3
	Title I/EDY	10,854	3.8	4.6	1.1
	Title I/Other	5,071	3.8	4.6	1.1
	Title I/EDY/ Other	19,887	3.8	4.6	1.1
	Total or Weighted Average	40,712	3.8	4.6	1.1
Six	Title I	4,302	4.5	5.3	1.1
	Title I/EDY	10,781	4.5	5.3	1.1
	Title I/Other	4,878	4.6	5.4	1.1
	Title I/EDY/ Other	20,396	4.6	5.4	1.1
	Total or Weighted Average	40,357	4.6	5.4	1.1

*Average seven months between pretest and post-test.

TABLE 27

Average Mathematics Achievement by Students in ESEA, Title I, Programs by Funding Source, 1973-74 Grades Seven, Eight, and Nine

Grade Level	Funding Source	Number of Students Tested	Average Grade Equivalent Score		Average Months of Gain per Month of Instruction*
			Pretest	Post-test	
Seven	Title I	3,785	4.7	5.5	1.1
	Title I/EDY	8,379	4.6	5.2	0.9
	Title I/Other	502	4.1	5.1	1.4
	Title I/EDY/ Other	1,215	4.4	4.9	0.7
	Total or Weighted Average	13,881	4.6	5.3	1.0
Eight	Title I	2,852	5.0	6.0	1.4
	Title I/EDY	2,681	5.1	5.9	1.1
	Title I/Other	452	5.1	6.2	1.3
	Title I/EDY/ Other	1,171	5.3	6.0	1.0
	Total or Weighted Average	7,156	5.1	6.0	1.3
Nine	Title I	3,863	6.0	6.9	1.3
	Title I/EDY	6,496	6.1	7.1	1.4
	Title I/Other	852	5.1	6.2	1.6
	Title I/EDY/ Other	924	5.1	5.9	1.1
	Total or Weighted Average	12,135	5.9	6.9	1.4

*Average seven months between pretest and post-test.

TABLE 28

Average Mathematics Achievement by Students in ESEA, Title I, Programs by Funding Source, 1973-74, Grades Ten, Eleven, and Twelve

Grade Level	Funding Source	Number of Students Tested	Average Grade Equivalent Score		Average Months of Gain per Month of Instruction*
			Pretest	Post-test	
Ten	Title I	686	7.9	8.7	1.1
	Title I/EDY	1,541	6.8	7.3	0.7
	Title I/EDY/ Other	171	5.5	6.2	1.0
	Total or Weighted Average	2,398	7.0	7.6	0.9
Eleven	Title I	286	6.5	7.2	1.0
	Title I/EDY	541	7.2	8.2	1.4
	Title I/EDY Other	94	5.9	6.8	1.3
	Total or Weighted Average	921	6.8	7.7	1.3
Twelve	Title I	133	7.4	8.2	1.1
	Title I/EDY	284	6.8	7.7	1.3
	Title I/EDY/ Other	19	7.4	7.4	0.0
	Total or Weighted Average	436	7.0	7.8	1.1

*Average seven months between pretest and post-test.

TABLE 29

Average Months of Gain in Mathematics Achievement Per Month of Instruction by Funding Source and Grade Level for Students in ESEA, Title I, Programs 1973-74

Funding Source	Grade Level											
	One	Two	Three	Four	Five	Six	Seven	Eight	Nine	Ten	Eleven	Twelve
Title I	1.1	1.3	1.3	1.4	1.3	1.1	1.1	1.4	1.3	1.1	1.0	1.1
Title I/ECE	1.3	1.4	1.4									
Title I/EDY	1.1	1.3	1.3	1.3	1.1	1.1	0.9	1.1	1.4	0.7	1.4	1.3
Title I/ECE/EDY	1.0	1.3	1.4									
Title I/Other	1.3	1.3	1.4	1.4	1.1	1.1	1.4	1.3	1.6			
Title I/ECE/Other	1.1	1.4	1.4									
Title I/EDY/Other	1.0	1.3	1.4	1.3	1.1	1.1	0.7	1.0	1.1	1.0	1.3	0.0
Title I/ECE/ECY/Other	1.0	1.3	1.3									
WEIGHTED AVERAGE	1.1	1.3	1.4	1.3	1.1	1.1	1.0	1.3	1.4	0.9	1.3	1.1

TABLE 30

Percent of ESEA, Title I, Students Scoring in Each Quarter of the Distribution of Mathematics Achievement Scores by Grade Level at Pretesting and Post-Testing: 1973-74

Grade Level	Number of Students Tested	Test	Percent of Students by Quarter			
			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Kindergarten, One, Two, and Three	116,843	Pre	48.7	27.1	15.3	8.9
	192,769	Post	32.2	28.3	20.3	19.2
Four, Five, and Six	120,266	Pre	63.5	23.1	9.4	4.0
	148,573	Post	49.4	28.0	14.8	7.8
Seven, Eight and Nine	19,661	Pre	73.9	17.8	5.9	2.4
	31,853	Post	62.3	25.1	9.2	3.4
Ten, Eleven, and Twelve	2,323	Pre	76.9	16.5	4.6	2.0
	3,922	Post	68.1	20.7	8.2	3.0
Total or Weighted	259,093	Pre	57.7	24.4	11.8	6.1

AUXILIARY SERVICES COMPONENT

Auxiliary services are those supportive activities and services not provided elsewhere in the program but necessary to the success of program participants. Included are pupil personnel services, library and media services, and health services. ESEA, Title I, programs are required to provide auxiliary services to support the basic instructional components. These services are made available to student participants in relation to their individual diagnosed needs.

Participation

Reports showed that auxiliary services were provided in 1,397 Title I projects to 499,912 pupils during the 1973-74 school year.

Objectives and Activities

The major auxiliary services objectives reported were related to providing pupil personnel services and health services. Approximately 56 percent of the schools reported measurable performance objectives; 44 percent indicated relatively vague goals or aims. Of the measurable objectives listed, about 72 percent referred to input (services provided), and 28 percent were based on output (changes in pupil behavior or achievement).

Specific objectives reported most frequently included such end results as the provision of health examinations, provision of referral services, and improvement in the pupils' personal health, school attendance, attitude, and academic achievement. Other major objectives focused on providing library and media services and health information. The least frequent objectives--each reported by only one school--were related to providing health education and reducing nutritional deficiencies.

Specific activities were emphasized in each of the auxiliary services provided. Pupil personnel services included--in order of importance--pychological services, individual counseling, welfare and attendance services, parent counseling, teacher consultation, speech therapy, psychological testing, home counseling, use of community aides, group counseling, psychological diagnosis, guidance inservice training, and case studies. The most important health services offered were: health examinations, nursing, vision screening, medical services, hearing screening, health education, nutrition, dental screening and services, family health services, speech screening, vision referrals, use of health aides, use of health records, hearing referrals, use of health volunteers, dental referrals, and nutrition screening. Library and media services activities included general services, use of personnel, materials, and facilities.

A direct relationship was noted between the frequency of activities listed in objectives and their importance as rated by project personnel.

Most of the important activities were related directly to specific objectives. Most activities were related to the objectives of providing health and pupil personnel services. Very few activities were reported for improving library skills.

In terms of implementing their proposed activities, two-thirds of the Title I projects reported no difference between activities provided and activities proposed in their 1973-74 Project Descriptions. Only 3 percent of the schools altered their original plans, usually by changing time schedules, substituting different tests, or providing individual instead of group counseling. Twenty-four percent of the schools provided additional activities not originally proposed. The most frequent additions were, in order, additional health services, more library services, and increased pupil personnel services.

Only 6 percent of the Title I schools provided fewer activities than proposed. Reasons varied for not providing proposed activities. The most frequent of the 13 reasons listed were lack of personnel, lack of funds, and lack of time.

Evaluation Methods

Auxiliary services were usually evaluated by identifying the criteria of a successful program and assessing the level of effectiveness of specific services in meeting those criteria. Of the 1,397 Title I projects reporting auxiliary services, 70 percent of the evaluations stated criteria in terms of amount or number of services provided. Only 30 percent reported criteria related to expected changes in pupil or staff behavior or performance. The most frequent criterion was the number of health examinations given.

The level of effectiveness was determined primarily by three evaluation methods: subjective judgments, enumeration or counting of participants or activities, and objective measurements. Each project reported the main methods used to evaluate the effectiveness of each major activity or service provided during 1973-74.

Analysis of project reports showed that 47 percent of the auxiliary services evaluations were determined by subjective judgments; 39 percent by enumeration data; and 14 percent by objective measurements.

Of the subjective judgments reported, 30 percent were based on staff evaluations; 24 percent on teacher opinions; and 21 percent on records and reports. Fewer than 2 percent of the projects included Advisory Committee responses or interviews in their evaluations. Subjective judgments were used most often in evaluating library services.

Enumeration data consisted primarily of counting the number of pupils served. Of the reports that included enumerations, 42 percent were tabulations of the number of participants, referrals, or contacts. Fewer than 2 percent of the projects counted the number of pupils placed in special classes. Enumeration data were used most extensively to evaluate health services.

Objective measurements reported most frequently were rating scales (40 percent), locally-constructed questionnaires (22 percent), and teachers' ratings (15 percent). Very few evaluations used students' ratings or attitude scales. Objective measures were used most frequently in the evaluation of pupil personnel services.

Results

Most of the results reported were related to stated objectives. Of the projects reporting measurable objectives, 42 percent attained their objectives, 29 percent achieved part of their objectives, 4 percent did not attain their objectives, and 25 percent reported results unrelated to their objectives.

Reports of 1,397 projects rated the level of effectiveness of specific auxiliary services in terms of meeting their school objectives. Pupil personnel services ratings were 74 percent "effective" or "very effective." The most effective pupil personnel services were individual counseling, teacher consultation, and psychological testing. The relatively least effective were guidance inservice, psychometric assistance, and group counseling.

Evaluation reports rated health services as 75 percent "effective" or "very effective." The most effective were nursing, diagnostic, and nutrition services. In general, the least effective health services were family, medical, and dental services.

Reports from schools included ratings of library services. Eighty-four percent of the ratings were "effective" or "very effective." The most effective services provided were materials and media centers; the least effective were mobile libraries and use of personnel.

A comparison was made between the importance and effectiveness of major auxiliary services provided, as rated by school personnel. Results are shown graphically in Figures 1, 2, and 3. The greatest discrepancies between "importance" and "effectiveness" were in three specific services--welfare and attendance, medical services, and media centers. Welfare and attendance and medical services ranked high in importance but low in effectiveness; media centers ranked high in effectiveness but low in importance.

There was a positive relation between the rank order of 22 specific auxiliary services on importance and effectiveness, as rated by project evaluations.

Positive results reported in relation to stated objectives are summarized in Table 31, based on data submitted by projects with measurable performance objectives. From the resulting improvement in school attendance, attitude, self-image, academic achievement, and personal health, it is evident that auxiliary services were effective in Title I programs. Very few schools, however, reported improvement in health knowledge, vocational knowledge, or library knowledge as a result of auxiliary services provided.

The results reflect a great deal of emphasis on providing services, but very little emphasis on affecting pupil performance or behavior.

Recommendations

Most of the recommendations reported by local project personnel suggested continuing, improving, expanding, increasing, implementing, or developing specific auxiliary services activities.

FIGURE 1

Relative Importance and Effectiveness of Ten Major Pupil Personnel Services Provided by 1,397 ESEA, Title I, Projects, 1973-74

	5 Most Important	5 Least Important
Five Most Effective	Individual counseling Teacher consultation Psychological testing Parent counseling	Speech therapy
Five Least Effective	Welfare and attendance	Home counseling Group counseling Psychometric assistance Guidance inservice

FIGURE 2

Relative Importance and Effectiveness of Seven Major Health Services Provided by 1,397 ESEA, Title I, Projects, 1973-74

	4 Most Important	3 Least Important
Four Most Effective	Nursing Diagnostic Health education	Nutrition
Three Least Effective	Medical	Dental Family Services

FIGURE 3

Relative Importance and Effectiveness of Five Major Library and Media Services Provided by 1,397 ESEA, Title I, Projects, 1973-74

	3 Most Important	2 Least Important
Three Most Effective	Materials General services	Media centers
Two Least Effective	Personnel	Mobile libraries

TABLE 31

Positive Results of Auxiliary Services Most Frequently Reported in Relation to Stated Objectives in 1,397 ESEA, Title I, Projects in California, 1973-74

Rank Order	Specific Results Reported	Percent of Projects Reporting
1	Provision of health services	37
2	Provision of health examinations	32
3	Provision of pupil personnel services	32
4	Provision of referral services	16
5	Improvement in school attendance	14
6	Provision of auxiliary services personnel	11
7	Improvement in pupil attitude, self-image	10
8	Provision of library and media services	10
9	Improvement in academic achievement	10
10	Improvement in personal health	9

Major recommendations for auxiliary services in general were to continue the present program, and provide additional services. Recommendations for pupil personnel service emphasized the need to provide additional services, add personnel, and develop pupil attitude and self-image. Most health service-related recommendations were for more health services, health education, dental services, nutrition education, speech therapy, referral and follow-up services, and health screening.

Relatively few recommendations focused on library services. When offered, they related mostly to providing additional services and personnel.

PARENT PARTICIPATION AND COMMUNITY INVOLVEMENT COMPONENT

In the Guidelines for Title I projects a Parent Participation and Community Involvement component is mandated. Specific plans must be included for improving communication between the school and the community for activities to make parents more aware of the school's instructional program and their children's progress, and for assisting parents in helping their children in the learning process. Parents are directly involved in program functions and responsibilities through service on the Parent Advisory Committee. Parent Education activities are included here.

Participation

It was reported by 1,417 Title 1 projects that 209,117 parents participated in Parent Participation activities in 1973-74. An additional 64,765 parents were reported to have been involved in Parent Education activities per se.

Objectives and Activities

Forty-two percent of the objectives reported for the Parent Participation component were measurable, 58 percent were vague. Of the measurable objectives, 66 percent were related to expected changes in parent behavior and performance; 34 percent concerned services provided by the district or project staff.

Projects reporting objectives related to expected changes in behavior and performance sought to increase parent visits to classrooms, parent assistance to develop community resource personnel for school use, attendance at school activities, and parent involvement in planning, implementation, and evaluation of the program. Few objectives stressed a more positive parent attitude, or the use of parents as volunteers and tutors. Project objectives most frequently reported, that were related to services provided, were dissemination of program information, program orientation, and home-school communication.

The activities reported to be most important in achieving stated program objectives for the Parent Participation component included parent-teacher conferences, Advisory Committee meetings, parent education and orientation, parent visits to the school site, parents in the classroom, and home-school communication. The most important activities were consistent with the most frequently stated objectives.

It was reported by 50 percent of the projects that all of their originally proposed activities were implemented. Eleven percent provided more activities than they had proposed, and 20 percent provided fewer activities. Nine percent of the projects did not respond to this item. Ten percent of the reported data indicated substitution of one activity for another.

Projects providing more activities than originally proposed frequently cited more meetings, classes and workshops, increased parent involvement in program implementation, and visits to other programs. Reported reasons for decreasing the number of originally proposed activities were lack of interest, insufficient parent participation, and poor home-school communication. Where program content changes were made, reorganization of personnel and lack of funds were most frequently cited.

Evaluation Methods

Analysis of 1,417 Title I projects revealed that 46 percent of the evaluation methods used consisted of enumeration of participants and activities, 40 percent were subjective judgments, and 14 percent were objective measurements. The most frequently used criterion was the number of parents participating.

More than half of the subjective judgments consisted of parent comments and staff evaluations. The objective measurements consisted primarily of parent questionnaires, rating and attitude scales, and number of meetings.

Results

Achievement of stated objectives for the Parent Participation component was reported by 52 percent of the projects, 19 percent attained part of their objectives, 17 percent reported negative results, and 12 percent reported results not related to their objectives. Results compared with objectives showed a positive relation between the statement of measurable objectives and results obtained. Very few projects with vague objectives reported positive results; most such projects reported irrelevant results.

Project reports rated the level of effectiveness of major activities provided in terms of meeting their project objectives. Most parent involvement activities were rated as "effective" or "very effective." The ratings show that the most effective activities were parent-teacher conferences, advisory committee meetings, open house, school-parent meetings, parents in class and communication with the home. The least effective, according to project ratings, were baby-sitting services, group meetings held in parent homes, PTA meetings, and planning sessions.

A comparison was made between the relative importance and effectiveness of the major parent involvement activities, as rated by project personnel. Results are summarized in Figure 4. A positive relation existed between the most important activities and the relative effectiveness of these activities. The least important activities were also rated as least effective.

FIGURE 4

Relative Importance and Effectiveness of Eight
Parent Participation Activities Provided
by 1,417 ESEA, Title I, Projects
in California, 1973-74

	4 Most Important	4 Least Important
Five Most Effective	Parent-teacher conferences Advisory Committee meetings Use of parents in class Communication with home	
Five Least Effective		Planning sessions Home calls and visits Group meetings in parent homes Social activities

Positive results most frequently reported in relation to stated objectives are summarized in Table 32. Parent activities most frequently resulted in parent involvement in school and class activities; more understanding of program goals and objectives; assistance in developing community resource personnel; increased attendance at workshops, education classes, and school activities; attendance at parent-teacher conferences; and involvement in program planning, implementation, and evaluation.

Recommendations

Recommendations made by projects, cited the recruitment and training of parent volunteers and aides to work at the school site and the need for more effective communication between the school and the home. Frequent mention was made of the desirability of engaging a liaison person to assist in this area. Recommendations also pertained to increasing the number and variety of activities offered to parents as a way to increase participation. Included in this area were resource centers designed for parent use and school use of community persons as resource personnel.

TABLE 32

Positive Results of Parent Participation Most Frequently Reported in Relation to Stated Objectives in 1,417 ESEA, Title I, Projects in California 1973-74

Rank Order	Specific Results Reported	Percent of Projects Reporting
1	Parents were involved in school and class activities.	19
2	Parents showed more understanding of goals, objectives, needs and child development.	15
3	Parents assisted in the development of community resource personnel.	14
4	Parent attendance increased at workshops, education classes and school activities.	14
5	Parents attended parent-teacher conferences.	12
6	Parents were involved in program planning, implementation and evaluation.	8

STAFF DEVELOPMENT COMPONENT

A staff development component is mandated in the ESEA, Title I, Guidelines. Specific objectives and activities that lead to improved performance by professional and nonprofessional staff are to be included in each school plan.

Participation

Inservice training of classroom teachers and aides to improve instruction received the greatest emphasis during the 1973-74 school year. Staff development activities included 51,531 participants.

Objectives and Activities

The major staff development component objectives reported by 1,370 Title I projects were related to the improvement in teaching techniques. Approximately 72 percent of the projects reported measurable performance objectives; 28 percent indicated relatively vague aims or goals. Of the well-defined objectives, 72 percent related to expected changes in behavior or performance; 28 percent mentioned services to be provided by the district or school staff.

Of the specific objectives listed, the most frequent were: improvement in individualized instruction and use of diagnostic/prescriptive techniques, organization for inservice training, improvement in writing instructional objectives, techniques of general instruction, improvement in planning, and objectives related to the numbers or types of personnel to receive training. Few objectives stressed teaching psychomotor skills, use of personnel, or improvement in pupil behavior or attitude.

Staff development activities were designed primarily to provide continuing inservice education to staff members. Activities were generally developed in response to local needs. The general activities most important in attaining component objectives were (in order): school-level workshops on instructional methods and content - especially diagnostic and prescriptive teaching and reading instruction - staff meetings, school or classroom visitations, joint teacher and aide training, district and county workshops, college courses, conferences, individual consultation, and school-site demonstrations.

The most important content areas for inservice activities were (in order of importance): reading, mathematics, language arts, and general curriculum. Relatively few projects reported inservice activities related to needs assessment, school-level planning, use of volunteers or tutors, parent involvement, parent education, multicultural education, or bilingual/bicultural education.

In terms of implementing activities as originally proposed, 67 percent of the projects reported no difference from the activities proposed. Twelve percent implemented fewer activities than proposed, 11 percent provided more activities than proposed, and another 10 percent substituted one activity for another in their program.

Programs providing more activities than proposed cited curriculum content changes and more scheduled inservice activities as reasons for the discrepancies. Most of the programs citing fewer activities than proposed did not specify the reason for the program discrepancy.

Evaluation Methods

Analysis of the evaluation criteria used to measure the effectiveness of staff development activities, showed that approximately 65 percent were related to the activities provided, with no regard to classroom implementation. About 29 percent were based on changes in behavior of teachers, as measured by use of new skills and materials, and of pupils, as shown by improved achievement, attitude, and interest. Another 6 percent of the criteria reported were either unclear or not related to stated objectives.

The effectiveness of staff development activities was evaluated primarily on the basis of subjective judgments, which relied heavily on staff evaluations and teacher opinions. Less frequently used evaluation techniques were objective measures - rating scales and questionnaires, and enumeration of participants and activities. Evaluation measures usually did not vary greatly according to specific subject areas or type of inservice activity provided. However, teachers' opinions were used most often to evaluate informal workshops; staff implementation, to evaluate the use of new materials and equipment; pupil performance, to evaluate techniques of reading and mathematics instruction; and parent comments, to evaluate parent education activities.

Results

Eighty-seven percent of the Title I staff development reports indicated attainment of the major objectives; 6 percent reported partially attained objectives. (In each case, however, over 60 percent of the respondents failed to offer any quantifiable data to support their conclusions.) About 5 percent of the projects reported results not related to stated objectives, and 1 percent indicated that their objectives were not attained. Another 1 percent failed to include any data on this item.

Evaluation reports from 1,370 Title I projects rated the effectiveness of specific staff development activities in meeting stated objectives. Most major activities were rated by project personnel as "effective" or "very effective" and included: techniques of reading instruction, diagnostic and prescriptive teaching techniques, techniques of mathematics instruction, and use of new materials and equipment. The least effective staff development activities were motion pictures, formal lectures, college classes, and parent education.

Comparisons were made between the reported importance of staff development activities and the effectiveness of these activities as rated by program personnel. Results are reported in Figure 5. Generally, the most important activities were also rated as the most effective whereas less important activities tended to be rated as less effective. The greatest discrepancies were in two specific activities: college classes ranked high in importance but low in effectiveness; demonstrations ranked low in importance and high in effectiveness.

FIGURE 5

Relative Importance and Effectiveness of Ten Major Staff Development Activities Provided by 1,370 ESEA, Title I, Projects in California, 1973-74

	5 Most Important	5 Least Important
Five Most Effective	Techniques of reading instruction Diagnostic-prescriptive teaching Techniques of math instruction Informal workshops	Demonstrations
Five Least Effective	College classes	Formal lectures Intergroup relations inservice Parent involvement inservice Parent education

A summary of the positive results of staff development activities most frequently reported appears in Table 33.

These results indicated a greater use of individualized instruction in reading and mathematics, better organization of inservice training, and improvement in writing instructional objectives and in general instructional skills. Very few schools reported improvement in teaching psychomotor skills, training in the use of personnel, or improvement in pupil behavior or attitude.

TABLE 33

Positive Results of Staff Development Activities Most Frequently Reported in Relation to Stated Objectives in 1,370 ESEA, Title I, Schools in California, 1973-74

Rank Order	Specific Results Reported	Percent of Schools Reporting
1	Improved individualized instruction in reading.	26
2	Improved individualized instruction in mathematics.	16
3	Better organization of inservice training.	11
4	Improvement in writing instructional objectives.	8
5	Improvement in general instructional skills.	6

Recommendations

Over 68 percent of the respondents suggested recommendations for improving the staff development component. The most frequent recommendations were related to improving the organization of inservice training through more visitation to other schools, improved workshops, and better use of consultants.

Other recommendations were related to: time changes for inservice training, including more released time, and more time for inservice, especially before school opens in the Fall; more teacher involvement in needs assessment and development of inservice activities; additional inservice training in instruction in reading and mathematics, multicultural education, language development, and bilingual/bicultural education.

More training in teaching techniques was recommended, particularly in individualized instruction, diagnostic/prescriptive techniques, and methods related to improving pupil behavior and attitude.

Other recommendations were for improved training of aides, parents, volunteers, and other personnel, and for more training in planning techniques.

Fewer than 3 percent of the projects recommended inservice training in evaluation techniques.

INTERGROUP RELATIONS COMPONENT

The intergroup relations component comprises those activities designed primarily to alleviate racial, social, or linguistic isolation. Intergroup relations programs foster interaction among groups of children from different ethnic, cultural, and socioeconomic backgrounds. Intergroup relations include, but are not limited to, cultural programs, school activities, ethnic studies, and student exchange programs.

Participants

Reports showed that the number of participants in intergroup relations activities during 1973-74 was 488,878.

Objectives and Activities

The major intergroup relations objectives reported by 1,382 Title I projects were related to such end results as interaction of various ethnic groups, knowledge of ethnic group contributions, more positive attitudes, and a greater understanding and acceptance of other cultures.

About 41 percent of the projects stated objectives related to increased intergroup acceptance, interaction, awareness, or appreciation of group differences. Thirty-six percent specified the acquisition of knowledge - that is, knowledge of the contributions of the different groups to society, ethnic facts, cultural heritage, and characteristics of the various groups. Specific groups mentioned most frequently were: Mexican-American, Black, Oriental, and American Indian. Specific changes in behavior reflected by more positive attitudes and an improved self-image were referred to in 55 percent of the reports. Infrequently mentioned were areas that pertained to better home-school relations, staff inservice training, and the promotion of a success-oriented learning environment.

Activities designed to achieve the stated objectives focused on opportunities to attain the component objectives. The activities noted as most important in 1,382 reports included cultural programs, use of multicultural units of study, classroom activities and discussions, field trips, and staff inservice training. There was a direct relation between the frequency of activities included in objectives and their importance as rated by project personnel; however, discrepancies were noted. Performance in a group and improved self-image were frequently cited objectives, yet ranked low in importance when rated by project personnel. Staff inservice training ranked high in importance, yet occurred infrequently in stated objectives.

No change from the activities proposed was reported by 61 percent of the projects. Eighteen percent provided more activities than they had proposed; 21 percent provided fewer activities. Programs providing more activities than proposed frequently cited more community involvement than anticipated, more enrichment activities, and more student participation.

Evaluation Methods

Evaluation of intergroup activities relied primarily on subjective judgments such as teacher opinions, observations and staff evaluation. Used less frequently were objective measurements - questionnaires, measures of pupil knowledge and staff surveys - and the enumeration of participants and activities.

Results

Achievement of stated objectives was reported by 72 percent of the projects. Partial achievement was reported by 20 percent and lack of achievement by 2 percent. Six percent reported results unrelated to their stated objectives.

Each project rated the effectiveness of the activities designed to achieve the stated objectives. Most activities were rated "effective" or "very effective". Most frequently reported activities were use of multicultural materials, cultural programs, group discussions, academic instruction, serving "ethnic foods", and social activities. The least effective, according to ratings of project personnel, were student exchange programs, parent meetings, staff inservice workshops, interaction events, group counseling and student tutors.

The relative importance and effectiveness of the major intergroup relations activities, as rated by project personnel, were compared. The results appear in Figure 6. The most important activities tended to be rated as most effective and activities that were less important were rated as least effective. Discrepancies were noted in rating some of the activities reported. Group discussions and social activities ranked low in importance but high in effectiveness. Staff inservice training, while rated by programs as one of the less effective activities, was also ranked as most important.

FIGURE 6

Relative Importance and Effectiveness of Nine Major Intergroup Relations Activities Provided by 1,382 ESEA, Title I, Projects in California, 1973-74

	4 Most Important	5 Least Important
Five Most Effective	Multicultural materials Academic instruction Cultural programs	Social activities Group discussions
Four Least Effective	Staff inservice workshops	Student exchange Group counseling Interaction events

Positive results reported in relation to stated program objectives are summarized in Table 34, based upon the data submitted by Title I projects.

Intergroup relations activities were effective, and resulted in increased participation, interaction between groups, positive pupil attitudes, and knowledge of cultural heritage and history.

TABLE 34

Positive Results of Intergroup Relations Activities
Most Frequently Reported in Relation to Stated Objectives in 1,382
ESEA, Title I, Projects in California, 1973-74

Rank Order	Specific Results Reported	Percent of Projects Reporting
1	Participated in intergroup activities.	52
2	Increased knowledge and understanding of other cultures.	33
3	Improved pupil self-esteem.	31
4	Increased acceptance of all groups.	26
5	Increased positive pupil behavior.	12
6	More friends chosen from other groups.	9
7	Improved pupil achievement.	9
8	Increased knowledge of intergroup contributions.	9
9	Provided enriched cultural experiences.	8

Recommendations

Of the recommendations made by the projects, the most frequently cited were a need to increase staff understanding, more integration of intergroup activities into the curriculum, and more program direction. Few recommendations related to areas such as affirmative action, a decreased number of activities, or the improvement of self-image.